JOURNAL OF COMPARATIVE & PHYSIOLOGICAL PSYCHOLOGY

Editor

ELIOT STELLAR

Associate Editors

DANIEL S. LEHRMAN

GARTH J. THOMAS

WILLIAM A. WILSON, JR.

Consulting Editors

E. C. BECK
COLIN BEER
ABRAHAM BLACK
BYRON A. CAMPBELL
PETER L. CARLTON
STEPHAN L. CHOROVER
RUSSELL M. CHURCH
JOHN D. CORBIT
VINCENT G. DETHIER
ROBERT EDELBERG
ALAN EPSTEIN
JOHN FULLER
MITCHELL GLICKSTEIN
GILBERT GOTTLIEB
ROBERT W. GOY
ERNST W. HANSEN
MARGARET K. HARLOW
JOHN A. HARVEY
ELIOT HEARST
JAMES R. ISON
LEONARD E. JARRARD
LEON J. KAMIN
BARRY KOMISARUK
FRANK A. LOGAN
N. J. MACKINTOSH
MORTIMER MISHKIN
HOWARD MOLTZ
DOUGLAS G. MOOK
WARREN ROBERTS
JAY S. ROSENBLATT
MARK R. ROSENZWEIG
JAMES C. SMITH
ORVILLE A. SMITH, JR.
RICHARD F. THOMPSON
ELLIOT S. VALENSTEIN
J. M. WARREN
MARTHA WILSON
DAVID ZEAMAN

HAROLD P. VAN COTT, Managing Editor

LOUISE ROSENBLATT AND BARBARA HOBBS, Technical Editors

BETTY E. STELLAR, Assistant to Editor

HENRY S. SALMON, Advertising and Business Manager

VOLUME 78, 1972

American Psychological Association, Inc.

Copyright © 1972 by the American Psychological Association, Inc.

CONTENTS OF VOLUME 78

ADAM, W. R., AND DAWBORN, J. K. Effect of Potassium Depletion on Mineral Appetite in the Rat ... 51

ADER, ROBERT, AND DEITCHMAN, ROBERT. Prenatal Maternal X-Irradiation: Maternal and Offspring Effects ... 202

ADERMAN, MORRIS. See RAYMOND, BONNIE.

ANISMAN, HYMIE, AND WALLER, T. GARY. Facilitative and Disruptive Effects of Prior Exposure to Shock on Subsequent Avoidance Performance ... 113

ARNOLD, WILLIAM J. See KOCH, MANFERD D.

ASHIDA, SACHIO. Developmental Changes in the Basal and Evoked Heart Rate in Neonatal Rats ... 368

AYRES, JOHN J. B. See BENEDICT, JAMES O.

BAUM, MICHAEL J. Precocious Mating in Male Rats following Treatment with Androgen or Estrogen ... 356

BAUMBACH, DANIEL T. See WAIZER, JONAS.

BECK, ROBERT C., NASH, RICHARD, VIERNSTEIN, LAURA, AND GORDON, LUCY. Sucrose Preferences of Hungry and Thirsty Rats as a Function of Duration of Stimulus Presentation ... 40

BENEDICT, JAMES O., AND AYRES, JOHN J. B. Factors Affecting Conditioning in the Truly Random Control Procedure in the Rat ... 323

BERLUCCHI, G., SPRAGUE, J. M., LEVY, J., AND DIBERARDINO, A. C. Pretectum and Superior Colliculus in Visually Guided Behavior and in Flux and Form Discrimination in the Cat (MONOGRAPH) ... 123

BERMAN, A. J. See WAIZER, JONAS.

BERMAN, DOREEN. See WAIZER, JONAS.

BERSH, PHILIP J., AND PAYNTER, WALTER E., JR. Pavlovian Extinction in Rats during Avoidance Response Prevention ... 255

BERTSCH, GREGORY J. Punishment of Consummatory and Instrumental Behavior: Effects on Licking and Bar Pressing in Rats ... 478

BLANCHARD, D. CAROLINE. See BLANCHARD, ROBERT J.

BLANCHARD, ROBERT J., AND BLANCHARD, D. CAROLINE. Effects of Hippocampal Lesions on the Rat's Reaction to a Cat ... 77

BLASS, ELLIOTT M. See BURKE, GENE H.

BOOTH, D. A. Satiety and Behavioral Caloric Compensation following Intragastric Glucose Loads in the Rat ... 412

BOOTH, D. A., LOVETT, D., AND MCSHERRY, G. M. Postingestive Modulation of the Sweetness Preference Gradient in the Rat (MONOGRAPH) ... 485

BRONSTEIN, PAUL M., AND SPEAR, NORMAN E. Acquisition of a Spatial Discrimination by Rats as a Function of Age ... 208

BROWN, CHARLES W. See GALLUP, GORDON G., JR.

BUREŠ, JAN. See FREEDMAN, NELSON L.

BURKE, GENE H., MOOK, DOUGLAS G., AND BLASS, ELLIOTT M. Hyperreactivity to Quinine Associated with Osmotic Thirst in the Rat ... 32

BURRIGHT, R. G. See ZUROMSKI, E. S.

CARLSON, NEIL R., CARTER, EDWIN N., AND VALLANTE, MICHAEL. Runway Alternation and Discrimination of Mice with Limbic Lesions ... 91

CARRAN, ARCHIE B. Biometrics of Reversal Learning in Mice: II. Diallel Cross ... 466

CARTER, EDWIN N. See CARLSON, NEIL R.

CHADDOCK, THOMAS E. Visual Detection of X Ray by the Rhesus Monkey ... 190

CHISZAR, DAVID A. See SPEAR, NORMAN E.

CLARK, MERTICE M. See GALEF, BENNETT G., JR.

COHEN, PERRIN S. See LOONEY, THOMAS A.

DAVIS, MICHAEL. Differential Retention of Sensitization and Habituation of the Startle Response in the Rat ... 260

DAWBORN, J. K. See ADAM, W. R.

DEBOLD, JOSEPH F. See HARDY, DONNA FITZROY.

DEITCHMAN, ROBERT. See ADER, ROBERT.

DENNIS, MAUREEN. See KOHN, BRUNO.

DIBERARDINO, A. C. See BERLUCCHI, G.

DONOVICK, P. J. See ZUROMSKI, E. S.

FINCK, ALFRED, SCHNECK, CARSON D., AND HARTMAN, ALBERT F. Development of Coclear Function in the Neonate Mongolian Gerbil (*Meriones unguiculatus*) 375
FRASER, DAVID. See SPIGEL, IRWIN M.
FREEDMAN, NELSON L., AND BUREŠ, JAN. Conditions of Phasic Impairment of Avoidance Responding during Bilateral Spreading Depression 433
GALEF, BENNETT G., JR., AND CLARK, METICE M. Mother's Milk and Adult Presence: Two Factors Determining Initial Dietary Selection by Weanling Rats 220
GALEF, BENNETT G., JR., AND HENDERSON, PATRICIA W. Mother's Milk: A Determinant of the Feeding Preferences of Weaning Rat Pups 213
GALLUP, GORDON G., JR., ROSEN, TIMOTHY S., AND BROWN, CHARLES W. Effect of Conditioned Fear on Tonic Immobility in Domestic Chickens 22
GORDON, LUCY. See BECK, ROBERT C.
GORDON, WILLIAM C. See SPEAR, NORMAN E.
GROSSMAN, L. B. See THOMPSON, C. I.
GROSSMAN, SEBASTIAN P. Aggression, Avoidance, and Reaction to Novel Environments in Female Rats with Ventromedial Hypothalamic Lesions 274
HAMILTON, LEONARD W. Intrabox and Extrabox Cues in Avoidance Responding: Effect of Septal Lesions 268
HARDY, DONNA FITZROY, AND DEBOLD, JOSEPH F. Effects of Coital Stimulation upon Behavior of the Female Rat 400
HARTMAN, ALBERT F. See FINCK, ALFRED.
HENDERSON, PATRICIA W. See GALEF, BENNETT G., JR.
HILL, CHARLES W. Transfer Effects of Cue-Related Movement Reversal in Discrimination Reversal Learning with Rhesus Monkeys 184
HORN, JOHN L. See SHUCARD, DAVID WM.
HORN, JOSEPH M. See TELLEGEN, AUKE.
JANKOVICH, J. P. See MCCOY, D. F.
JOHNSON, DAVID A. Developmental Aspects of Recovery of Function following Septal Lesions in the Infant Rat 331
KAUFMAN, HERBERT M. See WILSON, MARTHA.
KOCH, MANFERD D., AND ARNOLD, WILLIAM J. Effects of Early Social Deprivation on Emotionality in Rats 391
KOHN, BRUNO, AND DENNIS, MAUREEN. Observation and Discrimination Learning in the Rat: Specific and Nonspecific Effects 292
KUMAR, R., AND STOLERMAN, I. P. Resumption of Morphine Self-Administration by Ex-Addict Rats: An Attempt to Modify Tendencies to Relapse 457
LEVINSON, DANIEL M. Interocular Transfer in Guinea Pigs following Section of the Corpus Callosum 26
LEVY, J. See BERLUCCHI, G.
LIEB, JEFFREY P. See WILSON, MARTHA.
LOONEY, THOMAS A., AND COHEN, PERRIN S. Retardation of Jump-Up Escape Responding in Rats Pretreated with Different Frequencies of Noncontingent Electric Shock 317
LOVETT, D. See BOOTH, D. A.
MACKINTOSH, N. J. See TURNER, C.
MCCOY, D. F., AND JANKOVICH, J. P. Effects of Continuous Exposure to High Gravity on Gravity Preference in Rats 305
MCSHERRY, G. M. See BOOTH, D. A.
MITCHELL, JAMES C. See WILSON, J. ROGER.
MOOK, DOUGLAS G. See BURKE, GENE H.
NASH, RICHARD. See BECK, ROBERT C.
OATLEY, KEITH. See PANKSEPP, JAAK.
OLTON, DAVID S. Behavioral and Neuroanatomical Differentiation of Response-Suppression and Response-Shift Mechanisms in the Rat 450
PANKSEPP, JAAK, TONGE, DAVID, AND OATLEY, KEITH. Insulin and Glucostatic Control of Feeding. 226
PAUL, LUCI. Predatory Attack by Rats: Its Relationship to Feeding and Type of Prey 69
PAYNTER, WALTER E., JR. See BERSH, PHILIP J.
POWELL, ROBERT W. Analysis of Warm-Up Effects during Avoidance in Wild and Domesticated Rodents 311

RAYMOND, BONNIE, ADERMAN, MORRIS, AND WOLACH, ALLEN H. Incentive Shifts in the Goldfish.... 10
REHOVSKY, DAVID A., AND WAMPLER, RICHARD S. Failure to Obtain Sex Differences in Development of Obesity following Ventromedial Hypothalamic Lesions in Rats..... 102
RENZ, FRANCIS J. See WARD, INGEBORG L.
ROBERTS, WILLIAM A. Spatial Separation and Visual Differentiation of Cues as Factors Influencing Short-Term Memory in the Rat..... 284
ROSEN, TIMOTHY S. See GALLUP, GORDON G., JR.
SCHNECK, CARSON D. See FINCK, ALFRED.
SHUCARD, DAVID WM., AND HORN, JOHN L. Evoked Cortical Potentials and Measurement of Human Abilities..... 59
SIEGEL, SHEPARD. Conditioning of Insulin-Induced Glycemia..... 233
SMITH, MONCRIEFF H. Evidence for a Learning Component of Sodium Hunger in Rats..... 242
SPEAR, NORMAN E., GORDON, WILLIAM C., AND CHISZAR, DAVID A. Interaction between Memories in the Rat: Effect of Degree of Prior Conflicting Learning on Forgetting after Short Intervals.. 471
SPEAR, NORMAN E. See BRONSTEIN, PAUL M.
SPIGEL, IRWIN M., TRIVETT, SUSAN, AND FRASER, DAVID. Grooming Behavior and Competitive Dominance in the Albino Rat..... 409
SPRAGUE, J. M. See BERLUCCHI, G.
STOLERMAN, I. P. See KUMAR, R.
TELLEGEN, AUKE, AND HORN, JOSEPH M. Primary Aggressive Motivation in Three Inbred Strains of Mice..... 297
THIESSEN, D. D. See WHITSETT, J. MAL.
THOMPSON, C. I., AND GROSSMAN, L. B. Loss and Recovery of Long-Term Memories after ECS in Rats: Evidence for State-Dependent Recall..... 248
TONGE, DAVID. See PANKSEPP, JAAK.
TRIVETT, SUSAN. See SPIGEL, IRWIN M.
TURNER, C., AND MACKINTOSH, N. J. Stimulus Selection and Irrelevant Stimuli in Discrimination Learning by Pigeons..... 1
VALLANTE, MICHAEL. See CARLSON, NEIL R.
VAN HOESEN, GARY W. See WILSON, J. ROGER.
VIERNSTEIN, LAURA. See BECK, ROBERT C.
WAIZER, JONAS, BAUMBACH, DANIEL T., BERMAN, DOREEN, AND BERMAN, A. J. Visual Stimulation as a Reinforcer in Neonatally Asphyxiated Monkeys..... 386
WALK, RICHARD D. Visual Depth Preferences of the Domestic Duckling..... 14
WALLER, T. GARY. See ANISMAN, HYMIE.
WAMPLER, RICHARD S. See REHOVSKY, DAVID A.
WARD, INGEBORG L., AND RENZ, FRANCIS J. Consequences of Perinatal Hormone Manipulation on the Adult Sexual Behavior of Female Rats..... 349
WHITSETT, J. MAL, AND THIESSEN, D. D. Sex Difference in the Control of Scent-Marking Behavior in the Mongolian Gerbil (*Meriones unguiculatus*)..... 381
WILSON, J. ROGER, MITCHELL, JAMES C., AND VAN HOESEN, GARY W. Epithalamic and Ventral Tegmental Contributions to Avoidance Behavior in Rats..... 442
WILSON, MARTHA, KAUFMAN, HERBERT M., ZIELER, RONALD E., AND LIEB, JEFFREY P. Visual Identification and Memory in Monkeys with Circumscribed Inferotemporal Lesions..... 173
WOLACH, ALLEN H. See RAYMOND, BONNIE.
ZIELER, RONALD E. See WILSON, MARTHA.
ZUROMSKI, E. S., DONOVICK, P. J., AND BURRIGHT, R. G. Bar Pressing for Illumination Change in Albino Rats with Septal Lesions..... 83

JOURNAL OF COMPARATIVE & PHYSIOLOGICAL PSYCHOLOGY

Editor

ELIOT STELLAR

Associate Editors

DANIEL S. LEHRMAN
GARTH J. THOMAS
WILLIAM A. WILSON, JR.

Consulting Editors

E. C. BECK
COLIN BEER
ABRAHAM BLACK
BYRON A. CAMPBELL
PETER L. CARLTON
STEPHAN L. CHOROVER
RUSSELL M. CHURCH
JOHN D. CORBIT
VINCENT G. DETHIER
ROBERT EDELBERG
ALAN EPSTEIN
JOHN FULLER
MITCHELL GLICKSTEIN
GILBERT GOTTLIEB
ROBERT W. GOY
ERNST W. HANSEN
JOHN A. HARVEY
ELIOT HEARST
JAMES R. ISON
LEONARD E. JARRARD
LEON J. KAMIN
BARRY KOMISARUK
FRANK A. LOGAN
N. J. MACKINTOSH
MORTIMER MISHKIN
HOWARD MOLTZ
DOUGLAS G. MOOK
WARREN ROBERTS
JAY S. ROSENBLATT
MARK R. ROSENZWEIG
JAMES C. SMITH
ORVILLE A. SMITH, JR.
RICHARD F. THOMPSON
ELLIOT S. VALENSTEIN
J. M. WARREN
MARTHA WILSON
DAVID ZEAMAN

HAROLD P. VAN COTT, Managing Editor
LOUISE ROSENBLATT AND BARBARA HOBBS, Technical Editors
BETTY E. STELLAR, Assistant to Editor
HENRY S. SALMON, Advertising and Business Manager

VOLUME 79, 1972

American Psychological Association, Inc.
Copyright © 1972 by the American Psychological Association, Inc.

CONTENTS OF VOLUME 79

AHLERS, ROBERT H., AND BEST, PHILLIP J. Retrograde Amnesia for Discriminated Taste Aversions: A Memory Deficit 371

ANDERSON, D. CHRIS. See CROWELL, CHARLES R.

AZMITIA, EFRAIN C., JR. See QUARTERMAIN, DAVID.

BARTUS, RAYMOND T. See LEVERE, T. E.

BASBAUM, CAROL. See THOMAS, EARL.

BENNETT, EDWARD L. See ROSENZWEIG, MARK R.

BERGER, LAURENCE H. See KETTLEWELL, NEIL M.

BEST, PHILLIP J. See AHLERS, ROBERT H.

BHAGAVAN, HEMMIGE N. See BROOKSHIRE, KENNETH H.

BINDRA, DALBIR. See PAXINOS, GEORGE.

BLACK, A. H., AND YOUNG, G. A. Electrical Activity of the Hippocampus and Cortex in Dogs Operantly Trained to Move and to Hold Still 128

BLAND, B. H. See WHISHAW, I. Q.

BROOKSHIRE, KENNETH H., STEWART, CHARLES N., AND BHAGAVAN, HEMMIGE N. Saccharin Aversion in Alloxan-Diabetic Rats 385

CAIRNS, GEORGE F., JR., AND PERKINS, CHARLES C., JR. Delay of Punishment and Choice Behavior in the Rat 438

CANTOR, MICHAEL B., AND LOLORDO, VINCENT M. Reward Value of Brain Stimulation Is Inversely Related to Uncertainty about Its Onset 259

CAPALDI, ELIZABETH D. Resistance to Extinction in Rats as a Function of Deprivation Level and Schedule of Reward in Acquisition 90

CAPPELL, HOWARD. See LATANÉ, BIBB.

CASTELLANO, CLAUDIO. See OLIVERIO, ALBERTO.

COHEN, PERRIN S., AND TOKIEDA, FRANK K. Sucrose–Water Preference Reversal in the Water-Deprived Rat 254

COOPER, WILLIAM E., JR., AND VAN HOESEN, GARY W. Stria Medullaris–Habenular Lesions and Gnawing Behavior in Rats 151

CROWELL, CHARLES R., AND ANDERSON, D. CHRIS. Variations in Intensity, Interstimulus Interval, and Interval between Preconditioning CS Exposures and Conditioning with Rats 291

DESISTO, MICHAEL J., JR. See JOHNSON, ROGER N.

DIAMOND, MARIAN C. See ROSENZWEIG, MARK R.

DICARA, LEO V. See PAPPAS, BRUCE A.

DISTERHOFT, JOHN F. Learning in the Intact Cockroach (*Periplaneta americana*) When Placed in a Punishment Situation 1

EAST, D. L. See PAVLIK, W. B.

ERNST, A. JOHN. Developmental Differences in the Suppressive Effects of Punishment 510

EVANS, O. R. See PAVLIK, W. B.

FEIGLEY, DAVID A., PARSONS, PATRICIA J., HAMILTON, LEONARD W., AND SPEAR, NORMAN E. Development of Habituation to Novel Environments in the Rat 443

FRANCHINA, J. J. See PAVLIK, W. B.

GLICK, S. D., AND ZIMMERBERG, B. Comparative Recovery following Simultaneous- and Successive-Stage Frontal Brain Damage in Mice 481

GOLD, RICHARD M., AND PROULX, DIANE M. Bait-Shyness Acquisition Is Impaired by VMH Lesions That Produce Obesity 201

GOLD, RICHARD M., QUACKENBUSH, PATRICIA M., AND KAPATOS, GREGORY. Obesity following Combination of Rostrolateral to VMH Cut and Contralateral Mammillary Area Lesion 210

GREGOR, GARY L., SMITH, RICHARD F., SIMONS, LYNN S., AND PARKER, HOWARD B. Behavioral Consequences of Crowding in the Deermouse (*Peromyscus maniculatus*) 488

GROSSMAN, SEBASTIAN P. See MICZEK, KLAUS A.

HAMILTON, LEONARD W. See FEIGLEY, DAVID A.

HENDERSON, NORMAN D. Relative Effects of Early Rearing Environment and Genotype on Discrimination Learning in House Mice 243

HENRY, KENNETH R. Pinna Reflex Thresholds and Audiogenic Seizures: Developmental Changes after Acoustic Priming 77

HETRICK, MICHAEL. See MINEKA, SUSAN.

HOREL, JAMES A., AND KEATING, E. G. Recovery from a Partial Klüver–Bucy Syndrome in the Monkey Produced by Disconnection 105
HORNBUCKLE, PHYLLIS A. Delayed-Response Performance as a Function of Sensory Stimulation in the Squirrel and Owl Monkey 99
IMADA, HIROSHI. Emotional Reactivity and Conditionability in Four Strains of Rats 474
JACOBS, GERALD H. Increment-Threshold Spectral Sensitivity in the Squirrel Monkey 425
JOHNSON, ROGER N., DESISTO, MICHAEL J., JR., AND KOENIG, ALLEN B. Social and Developmental Experience and Interspecific Aggression in Rats 237
JOY, VIRGINIA. See LATANÉ, BIBB.
KAPATOS, GREGORY. See GOLD, RICHARD M.
KEATING, E. G. See HOREL, JAMES A.
KELSEY, John E. See MICZEK, KLAUS A.
KETTLEWELL, NEIL M., WOOLSTON, DONALD C., AND BERGER, LAURENCE H. Effects of Attenuating Cutaneous Afferent Activity on a Preestablished Nictitating Membrane Response in Rabbits 299
KLEIN, STEPHEN B. Adrenal–Pituitary Influence in Reactivation of Avoidance-Learning Memory in the Rat after Intermediate Intervals 341
KOENIG, ALLEN B. See JOHNSON, ROGER N.
LATANÉ, BIBB, JOY, VIRGINIA, MELTZER, JAMES, LUBELL, BERNARD, AND CAPPELL, HOWARD. Stimulus Determinants of Social Attraction in Rats 13
LATTIN, WILLIAM J., JR. See ZOLMAN, JAMES F.
LEVERE, T. E., AND BARTUS, RAYMOND T. Stimulus Information and Primate Discrimination Learning: Utilization of Preresponse Stimulus Information following Acquisition 432
LOLORDO, VINCENT M. See CANTOR, MICHAEL B.
LUBELL, BERNARD. See LATANÉ, BIBB.
MANOSEVITZ, MARTIN. Behavioral Heterosis: Food Competition in Mice 46
MANOSEVITZ, MARTIN, AND MONTEMAYOR, RAYMOND J. Interaction of Environmental Enrichment and Genotype 67
MARRAZO, MARTIN J. See RICCIO, DAVID C.
MCEWEN, BRUCE S. See QUARTERMAIN, DAVID.
MELTZER, JAMES. See LATANÉ, BIBB.
MESSERI, PATRIZIA. See OLIVERIO, ALBERTO.
MEYER, CORNELIUS C. Inhibition of Precocial Copulation in the Domestic Chick by Progesterone Brain Implants 8
MICZEK, KLAUS A., AND GROSSMAN, SEBASTIAN P. Effects of Septal Lesions on Inter- and Intraspecies Aggression in Rats 37
MICZEK, KLAUS A., KELSEY, JOHN E., AND GROSSMAN, SEBASTIAN P. Time Course of Effects of Septal Lesions on Avoidance, Response Suppression, and Reactivity to Shock 318
MILLER, NEAL E. See PAPPAS, BRUCE A.
MINEKA, SUSAN, SELIGMAN, MARTIN E. P., HETRICK, MICHAEL, AND ZUELZER, KATHY. Poisoning and Conditioned Drinking 377
MONTEMAYOR, RAYMOND J. See MANOSEVITZ, MARTIN.
MUGFORD, ROGER A., AND NOWELL, NORMAN W. Paternal Stimulation during Infancy: Effects upon Aggression and Open-Field Performance of Mice 30
NEWMAN, L. MICHAEL. Effects of Cholinergic Agonists and Antagonists on Self-Stimulation Behavior in the Rat 394
NOWELL, NORMAN W. See MUGFORD, ROGER A.
OLIVERIO, ALBERTO, CASTELLANO, CLAUDIO, AND MESSERI, PATRIZIA. Genetic Analysis of Avoidance, Maze, and Wheel-Running Behaviors in the Mouse 459
OLTON, DAVID S. Discrimination Behavior in the Rat: Differential Effects of Reinforcement and Nonreinforcement 284
PAPPAS, BRUCE A., DICARA, LEO V., AND MILLER, NEAL E. Acute Sympathectomy by 6-Hydroxydopamine in the Adult Rat: Effects on Cardiovascular Conditioning and Fear Retention 230
PARKER, HOWARD B. See GREGOR, GARY L.
PARSONS, PATRICIA J. See FEIGLEY, DAVID A.
PAVLIK, W. B., FRANCHINA, J. J., EAST, D. L., AND EVANS, O. R. Some Effects of Single-Alternation Training of Rats in a Double Runway 503

Paxinos, George, and Bindra, Dalbir. Hypothalamic Knife Cuts: Effects on Eating, Drinking, Irritability, Aggression, and Copulation in the Male Rat 219
Perkins, Charles C., Jr. See Cairns, George F., Jr.
Powell, Robert W. Responding under Basic Schedules of Reinforcement in the Crow 156
Price, Edward O. Domestication and Early Experience Effects on Escape Conditioning in the Norway Rat 51
Proulx, Diane M. See Gold, Richard M.
Quackenbush, Patricia M. See Gold, Richard M.
Quartermain, David, McEwen, Bruce S., and Azmitia, Efrain C., Jr. Recovery of Memory following Amnesia in the Rat and Mouse 360
Rescorla, Robert A. "Configural" Conditioning in Discrete-Trial Bar Pressing 307
Reynierse, James H. Differentiation of Escape and Avoidance Responding in Rats 165
Riccio, David C., and Marrazo, Martin J. Effects of Punishing Active Avoidance in Young and Adult Rats 453
Rogers, Hilliard. See Work, Murray S.
Rosenzweig, Mark R., Bennett, Edward L., and Diamond, Marian C. Cerebral Effects of Differential Experience in Hypophysectomized Rats 56
Schadler, Margaret, and Thomas, David R. On the Acquisition of Dimensional Stimulus Control by the Pigeon 82
Schlottmann, Robert S., and Seay, Bill. Mother–Infant Separation in the Java Monkey (*Macaca irus*) 334
Schmaltz, Leonard W., and Theios, John. Acquisition and Extinction of a Classically Conditioned Response in Hippocampectomized Rabbits (*Oryctolagus cuniculus*) 328
Scobie, Stanley R. Interaction of an Aversive Pavlovian Conditional Stimulus with Aversively and Appetitively Motivated Operants in Rats 171
Seay, Bill. See Schlottmann, Robert S.
Seligman, Martin E. P. See Mineka, Susan.
Simons, Lynn S. See Gregor, Gary L.
Smith, Richard F. See Gregor, Gary L.
Smith, Roy H. Wildness and Domestication in *Mus musculus:* A Behavioral Analysis 22
Sodetz, Frank J. Sidman Avoidance Performance and Response Suppression in Rats with Septal Lesions 142
Spear, Norman E. See Feigley, David A.
Stewart, Charles N. See Brookshire, Kenneth H.
Tees, Richard C. Effects of Visual Restriction in Rats on Generalization along the Dimension of Angular Orientation 494
Theios, John. See Schmaltz, Leonard W.
Thomas, David R. See Schadler, Margaret.
Thomas, Earl, and Basbaum, Carol. Excitatory and Inhibitory Processes in Hypothalamic Conditioning in Cats: Role of the History of the Negative Stimulus 419
Tokieda, Frank K. See Cohen, Perrin S.
Vanderwolf, C. H. See Whishaw, I. Q.
Van Hoesen, Gary W. See Cooper, William E., Jr.
Whishaw, I. Q., Bland, B. H., and Vanderwolf, C. H. Hippocampal Activity, Behavior, Self-Stimulation, and Heart Rate during Electrical Stimulation of the Lateral Hypothalamus 115
Woolston, Donald C. See Kettlewell, Neil M.
Work, Murray S., and Rogers, Hilliard. Effect of Estrogen Level on Food-Seeking Dominance among Male Rats 414
Young, G. A. See Black, A. H.
Zahorik, Donna M. Conditioned Physiological Changes Associated with Learned Aversions to Tastes Paired with Thiamine Deficiency in the Rat 189
Zimmerberg, B. See Glick, S. D.
Zolman, James F., and Lattin, William J., Jr. Development of Brightness Preferences in Young Chicks: Effects on Brightness Discrimination Learning 271
Zuelzer, Kathy. See Mineka, Susan.

JOURNAL OF COMPARATIVE & PHYSIOLOGICAL PSYCHOLOGY

Editor

ELIOT STELLAR

Associate Editors

DANIEL S. LEHRMAN

GARTH J. THOMAS

WILLIAM A. WILSON, JR.

Consulting Editors

E. C. BECK
COLIN BEER
ABRAHAM BLACK
BYRON A. CAMPBELL
PETER L. CARLTON
STEPHAN L. CHOROVER
RUSSELL M. CHURCH
JOHN D. CORBIT
VINCENT G. DETHIER
ROBERT EDELBERG
ALAN EPSTEIN
JOHN FULLER
CHARLES R. GALLISTEL
MITCHELL GLICKSTEIN
GILBERT GOTTLIEB
ROBERT W. GOY
ERNST W. HANSEN
JOHN A. HARVEY
JAMES R. ISON
LEONARD E. JARRARD
LEON J. KAMIN
BARRY KOMISARUK
FRANK A. LOGAN
N. J. MACKINTOSH
MORTIMER MISHKIN
HOWARD MOLTZ
DOUGLAS G. MOOK
DAVID C. RICCIO
WARREN ROBERTS
JAY S. ROSENBLATT
MARK R. ROSENZWEIG
JAMES C. SMITH
ORVILLE A. SMITH, JR.
RICHARD F. THOMPSON
ELLIOT S. VALENSTEIN
J. M. WARREN
MARTHA WILSON
DAVID ZEAMAN

HAROLD P. VAN COTT, Managing Editor

LOUISE ROSENBLATT AND BARBARA HOBBS, Technical Editors

BETTY E. STELLAR, Assistant to Editor

HENRY S. SALMON, Advertising and Business Manager

VOLUME 80, 1972

American Psychological Association, Inc.

Copyright © 1972 by the American Psychological Association, Inc.

CONTENTS OF VOLUME 80

ASHE, VICTOR M., AND MCCAIN, GARVIN. Comparison of One-Way and Shuttle-Avoidance Performance of Gerbils and Rats 293

BARRETT, JAMES. See HOFFMAN, HOWARD S.

BELLUZZI, JAMES D. Long-Lasting Effects of Cholinergic Stimulation of the Amygdaloid Complex in the Rat 269

BENNETT, EDWARD L. See ROSENZWEIG, MARK R.

BOOTH, DAVID A. Some Characteristics of Feeding during Streptozotocin-Induced Diabetes in the Rat 238

BORST, AXEL. See DELACOUR, JEAN.

BRONSTEIN, PAUL M. Open-Field Behavior of the Rat as a Function of Age: Cross-Sectional and Longitudinal Investigations 335

BROOKS, CHARLES I. See MCALLISTER, DOROTHY E.

BUREŠ, JAN. See DAVIS, JOEL L.

CAGGIULA, ANTHONY R. Shock-Elicited Copulation and Aggression in Male Rats 393

CAREY, ROBERT J. A Neuroanatomical Investigation of Enhanced Cutaneous and Gustatory Responsivity Associated with Septal Forebrain Injury 449

CHILLAG, DANA. See MENDELSON, JOSEPH.

COOPER, LESLIE M. See GALBRAITH, GARY C.

CURTO, KAREN. See YARCZOWER, MATTHEW.

D'AMICO, ANNETTE, AND VINEY, WAYNE. Effects of Response Force and Intertrial Interval on Extinction in Children 349

DAVIS, JOEL L., AND BUREŠ, JAN. Disruption of Saccharin-Aversion Learning in Rats by Cortical Spreading Depression in the CS–US Interval 398

DELACOUR, JEAN, AND BORST, AXEL. Failure to Find Homology in Rat, Cat, and Monkey for Functions of a Subcortical Structure in Avoidance Conditioning 458

DENMAN, PHILIP M., MILLER, LYLE H., SANDMAN, CURT A., SCHALLY, ANDREW V., AND KASTIN, ABBA J. Electrophysiological Correlates of Melanocyte-Stimulating Hormone Activity in the Frog 59

DILORENZO, PATRICIA M. See SCHWARTZBAUM, J. S.

DOMJAN, MICHAEL, AND WILSON, NANCY E. Contribution of Ingestive Behaviors to Taste-Aversion Learning in the Rat 403

DUNHAM, R. B. See WOOLEY, O. W.

DYCK, DENNIS G. See MELLGREN, ROGER L.

FISCHER, GLORIA J. Maximizing and Role of Correction Method in Probability Learning in Chicks. 49

FOUTS, ROGER S. Use of Guidance in Teaching Sign Language to a Chimpanzee (*Pan troglodytes*).. 515

FOX, PAUL A. Reward- and Nonreward-Produced Stimuli and Performance to Patterned Reinforcement in Rats 342

FREUND, GERHARD. See WALKER, DON W.

GALBRAITH, GARY C., COOPER, LESLIE M., AND LONDON, PERRY. Hypnotic Susceptibility and the Sensory Evoked Response 509

GENTILE, ANTOINETTE M., AND STAMM, JOHN S. Supplementary Cues and Delayed-Alternation Performance of Frontal Monkeys 230

GLENDENNING, KAREN KIRCHER. Effects of Septal and Amygdaloid Lesions on Social Behavior of the Cat 199

GLENDENNING, ROBERT L. Effects of Training between Two Unilateral Lesions of Visual Cortex upon Ultimate Retention of Black–White Discrimination Habits by Rats 216

GOLDMAN, JEFFREY A. See MCALLISTER, DOROTHY E.

GOTTLIEB, GILBERT. Zing-Yang Kuo: Radical Scientific Philosopher and Innovative Experimentalist (1898–1970) 1

HARLOW, HARRY F. See SUOMI, STEPHEN J.

HOFFMAN, HOWARD S., BARRETT, JAMES, RATNER, ALAN, AND SINGER, DAVID. Conditioned Suppression of Distress Calls in Imprinted Ducklings 357

HOTHERSALL, DAVID. See SLONAKER, ROBERT L.

HULL, ELAINE M. See SPECTOR, STEPHEN A.

JENNESS, DAVID. Auditory Evoked-Response Differentiation with Discrimination Learning in Humans 75
JONES, BARBARA P. See ROLLS, BARBARA J.
KASTIN, ABBA J. See DENMAN, PHILIP M.
KASTIN, ABBA J. See SANDMAN, CURT A.
KAUFMAN, KENNETH P. See SHINKMAN, PAUL G.
KREINICK, CAROL J. See SCHWARTZBAUM, J. S.
KURTZ, RUTH GROOME, ROZIN, PAUL, AND TEITELBAUM, PHILIP. Ventromedial Hypothalamic Hyperphagia in the Hypophysectomized Weanling Rat 19
LEONARD, CHRISTINA M. Effects of Neonatal (Day 10) Olfactory Bulb Lesions on Social Behavior of Female Golden Hamsters (*Mesocricetus auratus*) 208
LEVINE, MICHAEL S. See SCHWARTZBAUM, J. S.
LIPPMAN, LOUIS G. See THOMPSON, RICHARD W.
LONDON, PERRY. See GALBRAITH, GARY C.
MACDOUGALL, JAMES M. See VAN HOESEN, GARY W.
MCALLISTER, DOROTHY E., MCALLISTER, WALLACE R., BROOKS, CHARLES I., AND GOLDMAN, JEFFREY A. Magnitude and Shift of Reward in Instrumental Aversive Learning in Rats 490
MCALLISTER, WALLACE R. See MCALLISTER, DOROTHY E.
MCCAIN, GARVIN. See ASHE, VICTOR M.
MEANS, LARRY W. See WALKER, DON W.
MELLGREN, ROGER L., WRATHER, DAN M., AND DYCK, DENNIS G. Differential Conditioning and Contrast Effects in Rats 478
MELLO, WILLIAM F. See SCHWARTZBAUM, J. S.
MENDELSON, JOSEPH, ZEC, RON, AND CHILLAG, DANA. Effects of Desalivation on Drinking and Air Licking Induced by Water Deprivation and Hypertonic Saline Injections 30
MESSER, LINDA G. See WALKER, DON W.
MILLER, LYLE H. See DENMAN, PHILIP M.
MILLER, LYLE H. See SANDMAN, CURT A.
MITCHELL, JAMES C. See VAN HOESEN, GARY W.
MOSCOVITCH, MORRIS. Choice Reaction-Time Study Assessing the Verbal Behavior of the Minor Hemisphere in Normal Adult Humans 66
MUFSON, ELLIOTT J., AND WAMPLER, RICHARD S. Weight Regulation with Palatable Food and Liquids in Rats with Lateral Hypothalamic Lesions 382
MURAKAMI, H. Rhythmic Changes in the Water-Intake Rate of Mice in the Daytime 435
OBRIST, PAUL A. See SUTTERER, JAMES R.
PARÉ, WILLIAM P. Conditioning and Avoidance Responding Effects on Gastric Secretion in the Rat with Chronic Fistula 150
PARSONS, PATRICIA J., AND SPEAR, NORMAN E. Long-Term Retention of Avoidance Learning by Immature and Adult Rats as a Function of Environmental Enrichment 297
RATNER, ALAN. See HOFFMAN, HOWARD S.
REE, PETER. See ROZIN, PAUL.
ROLLS, BARBARA J., AND JONES, BARBARA P. Cessation of Drinking following Intracranial Injections of Angiotensin in the Rat 26
ROSENBLATT, JAY S. See TERKEL, JOSEPH.
ROSENZWEIG, MARK R., AND BENNETT, EDWARD L. Cerebral Changes in Rats Exposed Individually to an Enriched Environment 304
ROZIN, PAUL, AND REE, PETER. Long Extension of Effective CS-US Interval by Anesthesia between CS and US 43
ROZIN, PAUL. See KURTZ, RUTH GROOME.
RUGH, JOHN D. Variation in Human Masticatory Behavior under Temporal Constraints 169
SANDMAN, CURT A., MILLER, LYLE H., KASTIN, ABBA J., AND SCHALLY, ANDREW V. Neuroendocrine Influence on Attention and Memory 54
SANDMAN, CURT A. See DENMAN, PHILIP M.
SATINDER, K. PAUL. Behavior-Genetic-Dependent Self-Selection of Alcohol in Rats 422
SCHALLY, ANDREW V. See DENMAN, PHILIP M.
SCHALLY, ANDREW V. See SANDMAN, CURT A.
SCHWARTZBAUM, J. S., DILORENZO, PATRICIA M., MELLO, WILLIAM F., AND KREINICK, CAROL J. Further Evidence of Dissociation between Reactivity and Visual Evoked Response following Septal Lesions in Rats 143

SCHWARTZBAUM, J. S., KREINICK, CAROL J., AND LEVINE, MICHAEL S. Behavioral Reactivity and Visual Evoked Potentials to Photic Stimuli following Septal Lesions in Rats 123
SHETTLEWORTH, SARA J. Stimulus Relevance in the Control of Drinking and Conditioned Fear Responses in Domestic Chicks (*Gallus gallus*) 175
SHINKMAN, PAUL G., AND KAUFMAN, KENNETH P. Posttrial Hippocampal Stimulation and CER Acquisition in the Rat 283
SINGER, DAVID. See HOFFMAN, HOWARD S.
SINGH, DEVENDRA. Preference for Mode of Obtaining Reinforcement in Rats with Lesions in Septal or Ventromedial Hypothalamic Area 259
SLONAKER, ROBERT L., AND HOTHERSALL, DAVID. Collateral Behaviors and the DRL Deficit of Rats with Septal Lesions 91
SMITH, HOWARD V. Effects of Environmental Enrichment on Open-Field Activity and Hebb-Williams Problem Solving in Rats 163
SMITH, ORVILLE A. See WALIKE, BARBARA CALEEN.
SPEAR, NORMAN E. See PARSONS, PATRICIA J.
SPECTOR, STEPHEN A., AND HULL, ELAINE M. Anosmia and Mouse Killing by Rats: A Nonolfactory Role for the Olfactory Bulbs 354
SPROTT, RICHARD L. Passive-Avoidance Conditioning in Inbred Mice: Effects of Shock Intensity, Age, and Genotype 327
STAMM, JOHN S. See GENTILE, ANTOINETTE M.
STROBEL, MICHAEL G. Social Facilitation of Operant Behavior in Satiated Rats 502
SUOMI, STEPHEN J., AND HARLOW, HARRY F. Depressive Behavior in Young Monkeys Subjected to Vertical Chamber Confinement 11
SUTTERER, JAMES R., AND OBRIST, PAUL A. Heart Rate and General Activity Alterations of Dogs during Several Aversive Conditioning Procedures 314
TEITELBAUM, PHILIP. See KURTZ, RUTH GROOME.
TERKEL, JOSEPH, AND ROSENBLATT, JAY S. Humoral Factors Underlying Maternal Behavior at Parturition: Cross Transfusion between Freely Moving Rats 365
THOMAS, JOHN B. Stimulus Perseveration and Choice Behavior in Rats with Septal Lesions 97
THOMPSON, RICHARD W., AND LIPPMAN, LOUIS G. Exploration and Activity in the Gerbil and Rat 439
VAN HOESEN, GARY W., MACDOUGALL, JAMES M., AND MITCHELL, JAMES C. Discrimination of Emitted Behavior following Septal Area Lesions in Rats 106
VINEY, WAYNE. See D'AMICO, ANNETTE.
WALIKE, BARBARA CALEEN, AND SMITH, ORVILLE A. Regulation of Food Intake during Intermittent and Continuous Cross Circulation in Monkeys (*Macaca mulatta*) 372
WALKER, DON W., MESSER, LINDA G., FREUND, GERHARD, AND MEANS, LARRY W. Effect of Hippocampal Lesions and Intertrial Interval on Single-Alternation Performance in the Rat 469
WAMPLER, RICHARD S. See MUFSON, ELLIOTT J.
WEISINGER, RICHARD S., AND WOODS, STEPHEN C. Formalin-Like Sodium Appetite and Thirst Elicited by a Conditioned Stimulus in Rats 413
WILSON, NANCY E. See DOMJAN, MICHAEL.
WOODS, STEPHEN C. See WEISINGER, RICHARD S.
WOOLEY, O. W., WOOLEY, S. C., AND DUNHAM, R. B. Can Calories Be Perceived and Do They Affect Hunger in Obese and Nonobese Humans? 250
WOOLEY, S. C. See WOOLEY, O. W.
WRATHER, DAN M. See MELLGREN, ROGER L.
YARCZOWER, MATTHEW, AND CURTO, KAREN. Stimulus Control in Pigeons after Extended Discriminative Training 484
ZEC, RON. See MENDELSON, JOSEPH.

JOURNAL OF COMPARATIVE & PHYSIOLOGICAL PSYCHOLOGY

Editor

ELIOT STELLAR

Associate Editors

DANIEL S. LEHRMAN
GARTH J. THOMAS
WILLIAM A. WILSON, JR.

Consulting Editors

E. C. BECK
COLIN BEER
ABRAHAM BLACK
BYRON A. CAMPBELL
PETER L. CARLTON
STEPHAN L. CHOROVER
RUSSELL M. CHURCH
JOHN D. CORBIT
VINCENT G. DETHIER
ROBERT EDELBERG
ALAN EPSTEIN
JOHN FULLER
CHARLES R. GALLISTEL
MITCHELL GLICKSTEIN
GILBERT GOTTLIEB
ROBERT W. GOY
ERNST W. HANSEN
JOHN A. HARVEY
JAMES R. ISON
LEONARD E. JARRARD
LEON J. KAMIN
BARRY KOMISARUK
FRANK A. LOGAN
N. J. MACKINTOSH
MORTIMER MISHKIN
HOWARD MOLTZ
DOUGLAS G. MOOK
ROBERT A. RESCORLA
DAVID C. RICCIO
WARREN ROBERTS
JAY S. ROSENBLATT
MARK R. ROSENZWEIG
JAMES C. SMITH
ORVILLE A. SMITH, JR.
E. M. STRICKER
RICHARD F. THOMPSON
ELLIOT S. VALENSTEIN
J. M. WARREN
MARTHA WILSON
DAVID ZEAMAN

HAROLD P. VAN COTT, Managing Editor
LOUISE ROSENBLATT AND BARBARA HOBBS, Technical Editors
BETTY E. STELLAR, Assistant to Editor
HENRY S. SALMON, Advertising and Business Manager

VOLUME 81, 1972

American Psychological Association, Inc.
Copyright © 1972 by the American Psychological Association, Inc.

ACKNOWLEDGMENTS

In addition to the regular panel of Consulting Editors, the following people reviewed and evaluated manuscripts for the *Journal of Comparative and Physiological Psychology* in the year 1971 during preparation of the 1972 volumes.

Robert Ader
Harlow Ades
Herbert Barry, III
John R. Brobeck
Judson S. Brown
Nelson Butters
Harry J. Carlisle
Tiina E. Corbit
Victor H. Denenberg
Ray M. Denny
Leyla de Toledo
Peter J. Donovick
Steven B. Edwards
Paul Ellen
Samuel Feldman
Louis B. Flexner
John P. Flynn
Charles R. Gallistel
Anne Geller
Henry Gleitman
Graham Goddard
I. Gormezano
Roger Gorski
G. R. Grice
Charles G. Gross
Philip Groves
Charles L. Hamilton
John Hammack
Richard Herrnstein
William Hodos
Bartley G. Hoebel
Janellen Huttenlocher
David Jacobowitz
Murray Jarvik
Henry A. Jordan
Bernard Karmel
Daniel Kimble
Marcel Kinsbourne
Donald Kolakowski
Arthur P. Kowell
H. C. Lansdell
David Margules
Bruce Masterton
Stephen C. Maxson
James McGaugh
Donald Meyer
Susan Mineka
W. D. Neff
Paul A. Obrist
William P. Paré
Stanley Ratner
Robert Rescorla
David Riccio
William Riddell
Paul Rozin
Evelyn Satinoff
Neil Schneiderman
Jeri Sechzer
Martin Seligman
Donald Shankweiler
Douglas Smith
Gerard E. Smith
Charles R. Snowdon
Frederick Snyder
Robert L. Snyder
Richard L. Solomon
Norman E. Spear
James M. Sprague
Edward M. Stricker
Philip Teitelbaum
John Theios
Milton Trapold
Lucille H. Turner
C. H. Vanderwolf
Allan R. Wagner
Richard M. Warren
Abraham Wikler
Dean Yeager

CONTENTS OF VOLUME 81

ADKINS, ELIZABETH K., AND ADLER, NORMAN T. Hormonal Control of Behavior in the Japanese Quail 27
ADLER, NORMAN T. See ADKINS, ELIZABETH K.
ANDERSON, CHRISTINE. See MAIER, STEVEN R.
BALAGURA, SAUL, BROPHY, JUDITH, AND DEVENPORT, LYNN D. Modification of Learned Aversion to LiCl and NaCl by Multiple Experiences with LiCl 212
BANUAZIZI, ALI. Discriminative Shock-Avoidance Learning of an Autonomic Response under Curare 336
BATSCHE, CATHERINE J. See CAMPBELL, PATRICK E.
BATSCHE, GEORGE M. See CAMPBELL, PATRICK E.
BECHTOLD, RUTH E. See REESE, ELLEN P.
BERGER, BARRY D. Conditioning of Food Aversions by Injections of Psychoactive Drugs 21
BERNTSON, GARY G. Blockade and Release of Hypothalamically and Naturally Elicited Aggressive Behaviors in Cats following Midbrain Lesions 541
BLANCHARD, D. CAROLINE, AND BLANCHARD, ROBERT J. Innate and Conditioned Reactions to Threat in Rats with Amygdaloid Lesions 281
BLANCHARD, ROBERT J. See BLANCHARD, D. CAROLINE.
BOOTH, D. A. Conditioned Satiety in the Rat 457
BREGMAN, NORMAN J. See LEWIS, DONALD J.
BRENER, JASPER, See GOESLING, WENDELL J.
BRONSTEIN, PAUL M. Repeated Trials with the Albino Rat in the Open Field as a Function of Age and Deprivation 84
BROPHY, JUDITH. See BALAGURA, SAUL.
BURR, D. E. SCOTT, AND THOMAS, DAVID R. Effect of Proactive Inhibition upon the Postdiscrimination Generalization Gradient 441
CAMPBELL, BYRON A., AND MABRY, PAUL D. Ontogeny of Behavioral Arousal: A Comparative Study 371
CAMPBELL, PATRICK E., BATSCHE, CATHERINE J., AND BATSCHE, GEORGE M. Spaced-Trials Reward Magnitude Effects in the Rat: Single versus Multiple Food Pellets 360
CARTWRIGHT, JOHANNA. See TEES, RICHARD C.
CHANTREY, B. F. Enhancement and Retardation of Discrimination Learning in Chicks after Exposure to the Discriminanda 256
CONNOR, JAMES L., AND WINSTON, HARVEY. Genetic Analysis of Conditioned Emotional Responses in the Mouse (*Mus musculus L.*) 37
COOPER, R. M. See PEITCHINIS, J. A.
CORNWELL, P. R. See WARREN, J. M.
COWLEY, VIRGINIA L. See REESE, ELLEN P.
DEUTSCH, J. A., AND ROCKLIN, K. Anticholinesterase Amnesia as a Function of Massed or Spaced Retest 64
DEVENPORT, LYNN D. See BALAGURA, SAUL.
DIAMOND, IRVING T. See KILLACKEY, HERBERT.
DIAMOND, RHEA M. See HEIN, ALAN.
DI GIUSTO, E. L., AND KING, M. G. Chemical Sympathectomy and Avoidance Learning in the Rat .. 491
DOTY, RICHARD L. Odor Preferences of Female *Peromyscus maniculatus bairdi* for Male Mouse Odors of *P. m. bairdi* and *P. leucopus noveboracensis* as a Function of Estrous State 191
DUNCAN, PERRY M. Effect of Septal Area Damage and Base-Line Activity Levels on Conditioned Heart-Rate Response in Rats 131
ECKMAN, JUDITH. See LATANÉ, BIBB.
EISERER, LEONARD A. See HOFFMAN, HOWARD S.
ELSTER, A. J. See SIDEROFF, S.
EYEBERG, SHEILA. See LEWINSOHN, PETER M.
FARRAR, C. H. See RIESS, DAVE.
FERGUSON, DONALD G. See FREEDMAN, NELSON L.
FISCHER, GLORIA J. Sound Stimuli and Following in a Domestic Fowl: Frequency, Rate, and Duration 183
FITZPATRICK, DAVID. See FRENCH, DAVID.

FREEDMAN, NELSON L., FERGUSON, DONALD G., AND WILSON, DIANNE. Regulatory and Nonregulatory Effects of Functional Decortication on Eating in Rats 233
FRENCH, DAVID, FITZPATRICK, DAVID, AND LAW, O. THOMAS. Operant Investigation of Mating Preference in Female Rats 226
GELLER, ANNE. See ROBUSTELLI, FRANCESCO.
GIULIAN, DANA. See SCHMALTZ, LEONARD W.
GOESLING, WENDELL J., AND BRENER, JASPER. Effects of Activity and Immobility Conditioning upon Subsequent Heart-Rate Conditioning in Curarized Rats 311
GORMEZANO, I. See SHEAFOR, PATRICK J.
GROSSEN, NEAL E., AND KELLEY, MICHAEL J. Species-Specific Behavior and Acquisition of Avoidance Behavior in Rats 306
GROSSMAN, SEBASTIAN P. See MICZEK, KLAUS A.
HANSEN, GARY. See MILLER, JAMES T.
HARPER, A. E. See ZAHLER, LUCY PEREZ.
HEIN, ALAN, AND DIAMOND, RHEA M. Locomotory Space as a Prerequisite for Acquiring Visually Guided Reaching in Kittens 394
HEISE, GEORGE A. See WARBURTON, DAVID M.
HINDERLITER, CHARLES F. See NAGY, Z. MICHAEL.
HOFFMAN, HOWARD S., RATNER, ALAN M., AND EISERER, LEONARD A. Role of Visual Imprinting in the Emergence of Specific Filial Attachments in Ducklings 399
HYNAN, MICHAEL J. See KNUTSON, JOHN F.
JARVIK, MURRAY E. See ROBUSTELLI, FRANCESCO.
KAPLAN, HARRIETT, AND MIEZEJESKI, CHARLES. Development of Seizures in the Mongolian Gerbil (*Meriones unguiculatus*) 267
KELLEY, MICHAEL J. See GROSSEN, NEAL E.
KELLY, PETER H. See ROLLS, EDMUND T.
KENNEY, NANCY J. See MOOK, DOUGLAS G.
KILLACKEY, HERBERT, WILSON, MARTHA, AND DIAMOND, IRVING T. Further Studies of the Striate and Extrastriate Visual Cortex in the Tree Shrew 45
KING, M. G. See DI GIUSTO, E. L.
KNUTSON, JOHN F., AND HYNAN, MICHAEL J. Influence of Upright Posture on Shock-Elicited Aggression in Rats 297
KOPPELL, STEVEN, AND SODETZ, FRANK J. Septal Ablation in the Rat and Bar Pressing under Appetitive and Aversive Control 274
KOVNER, RICHARD, AND STAMM, JOHN S. Disruption of Short-Term Visual Memory by Electrical Stimulation of Inferotemporal Cortex in the Monkey 163
LATANÉ, BIBB, NESBITT, PAUL, ECKMAN, JUDITH, AND RODIN, JUDITH. Long- and Short-Term Social Deprivation and Sociability in Rats 69
LAW, O. THOMAS. See FITZPATRICK, DAVID.
LEWINSOHN, PETER M., ZIELER, RONALD E., LIBET, JULIAN, EYEBERG, SHEILA, AND NELSON, GARY. Short-Term Memory: A Comparison between Frontal and Nonfrontal Right- and Left-Hemisphere Brain-Damaged Patients 248
LEWIS, DONALD J., BREGMAN, NORMAN J., AND MAHAN, JOHN J., JR. Cue-Dependent Amnesia in Rats 243
LIBET, JULIAN. See LEWINSOHN, PETER M.
LIEBERMAN, DAVID A. See MAIER, STEVEN R.
LOVELY, RICHARD H., PAGANO, ROBERT R., AND PAOLINO, RONALD M. Shuttle-Box-Avoidance Performance and Basal Corticosterone Levels as a Function of Duration of Individual Housing in Rats 331
MABRY, PAUL D. See CAMPBELL, BYRON A.
MAHAN, JOHN J., JR. See LEWIS, DONALD J.
MAIER, STEVEN F., ANDERSON, CHRISTINE, AND LIEBERMAN, DAVID A. Influence of Control of Shock on Subsequent Shock-Elicited Aggression 94
MALINOWSKI, BEVERLY. See MILLER, RALPH R.
MARSH, GEORGE. Prediction of the Peak Shift in Pigeons from Gradients of Excitation and Inhibition 262
MASTERTON, BRUCE, AND SKEEN, L. C. Origins of Anthropoid Intelligence: Prefrontal System and Delayed Alternation in Hedgehog, Tree Shrew, and Bush Baby 423

Miczek, Klaus A., and Grossman, Sebastian P. Punished and Unpunished Operant Behavior after Atropine Administration to the VMH of Squirrel Monkeys 318
Miezejeski, Charles. See Kaplan, Harriett.
Miller, James T., Hansen, Gary, and Thomas, David R. Effects of Stimulus Similarity and Response Criterion on Successive Discrimination Reversal Learning 434
Miller, Ralph R., Malinowski, Beverly, Puk, Gerald, and Springer, Alan D. State-Dependent Models of ECS Induced Amnesia in Rats 533
Misanin, James R. See Nagy, Z. Michael.
Mitcham, Judson C., and Thomas, Roger K., Jr. Effects of Substantia Nigra and Caudate Nucleus Lesions on Avoidance Learning in Rats 101
Mook, Douglas G., Kenney, Nancy J., Roberts, Susan, Nussbaum, Alan I., and Rodier, William I., III. Ovarian–Adrenal Interactions in Regulation of Body Weight by Female Rats 198
Nagy, Z., Michael, Misanin, James R., Newman, Judith A., Olsen, Peter L., and Hinderliter, Charles F. Ontogeny of Memory in the Neonatal Mouse 380
Nelson, Gary. See Lewinsohn, Peter M.
Nesbitt, Paul. See Latané, Bibb.
Newman, Judith A. See Nagy, Z. Michael.
Nussbaum, Alan I. See Mook, Douglas G.
Olsen, Peter L. See Nagy, Z. Michael.
Oswalt, Robert M. Relationship between Level of Visual Pattern Difficulty during Rearing and Subsequent Discrimination in Rats 122
Pagano, Robert R. See Lovely, Richard H.
Paolino, Ronald M. See Lovely, Richard H.
Peitchinis, J. A., and Cooper, R. M. Ipsiversive Progression and Unilateral Posterior Cortical Lesions in the Rat 126
Prochaska, James. See Schiff, Robert.
Pubols, B. H. See Warren, J. M.
Puk, Gerald. See Miller, Ralph R.
Ratner, Alan M. See Hoffman, Howard S.
Ratner, Stanley C. Habituation and Retention of Habituation in the Leech (*Macrobdella decora*) 115
Rech, Richard H. See Swonger, A. K.
Reese, Ellen P., Schotté, Cynthia S., Bechtold, Ruth E., and Cowley, Virginia L. Initial Preference of Chicks from Five Rearing Conditions for a Hen or a Rotating Light 76
Rescorla, Robert A. See Rizley, Ross C.
Riess, Dave, and Farrar, C. H. Shock Intensity, Shock Duration, Sidman Avoidance Acquisition, and the "All or Nothing" Principle in Rats 347
Rizley, Ross C., and Rescorla, Robert A. Associations in Second-Order Conditioning and Sensory Preconditioning 1
Roberts, Susan. See Mook, Douglas G.
Robustelli, Francesco, Geller, Anne, and Jarvik, Murray E. Systematic Analysis of the Detention Phenomenon in Mice 472
Rocklin, K. See Deutsch, J. A.
Rodier, William I., III. See Mook, Douglas G.
Rodin, Judith. See Latané, Bibb.
Rolls, Edmund T., and Kelly, Peter H. Neural Basis of Stimulus-Bound Locomotor Activity in the Rat 173
Rottman, Steven J., and Snowdon, Charles T. Demonstration and Analysis of an Alarm Pheromone in Mice 483
Schiff, Robert, Smith, Nelson, and Prochaska, James. Extinction of Avoidance in Rats as a Function of Duration and Number of Blocked Trials 356
Schmaltz, Leonard W., and Giulian, Dana. Faster Acquisition of Discriminated Lever-Press Avoidance by Hippocampectomized Rats 149
Schneiderman, N. See Sideroff, S.
Schnurr, Rosina. Localization of the Septal Rage Syndrome in Long-Evans Rats 291
Schotté, Cynthia S. See Reese, Ellen P.
Sheafor, Patrick J., and Gormezano, I. Conditioning the Rabbit's (*Oryctolagus cuniculus*) Jaw-Movement Response: US Magnitude Effects on URs, CRs, and Pseudo-CRs 449
Shogren, Robert E. See Woods, Stephen C.

SIDEROFF, S., ELSTER, A. J. AND SCHNEIDERMAN, N. Cardiovascular Classical Conditioning in Rabbits (*Oryctolagus cuniculus*) using Appetitive or Aversive Hypothalamic Stimulation as the US 501
SKEEN, L. C. See MASTERTON, BRUCE.
SMITH, NELSON. See SCHIFF, ROBERT.
SNOWDON, CHARLES T. See ROTTMAN, STEVEN J.
SODETZ, FRANK J. See KOPPELL, STEVEN.
SPRINGER, ALAN D. See MILLER, RALPH R.
STAMM, JOHN S. See KOVNER, RICHARD.
SWONGER, A. K., AND RECH, RICHARD H. Serotonergic and Cholinergic Involvement in Habituation of Activity and Spontaneous Alternation of Rats in a Y Maze 509
TARPY, ROGER M., AND VAN-TOLLER, C. Relationship between Activity and Hypothermia in Immunosympathectomized Mice 108
TEES, RICHARD C., AND CARTWRIGHT, JOHANNA. Sensory Preconditioning in Rats following Early Visual Deprivation 12
THOMAS, DAVID R. See BURR, D. E. SCOTT.
THOMAS, DAVID R. See MILLER, JAMES T.
THOMAS, JOHN B., AND THOMAS, KAY A. Running-Wheel Avoidance Behavior following Septal Area Lesions in Rats 143
THOMAS, KAY A. See THOMAS, JOHN B.
THOMAS, ROGER K., JR. See MITCHAM, JUDSON C.
VAN-TOLLER, C. See TARPY, ROGER M.
WARBURTON, DAVID M., AND HEISE, GEORGE A. Effects of Scopolamine on Spatial Double Alternation in Rats 523
WARREN, J. M., CORNWELL, P. R., WEBSTER, W. G., AND PUBOLS, B. H. Unilateral Cortical Lesions and Paw Preferences in Cats 410
WEBSTER, W. G. See WARREN, J. M.
WILSON, DIANNE. See FREEDMAN, NELSON L.
WILSON, MARTHA. See KILLACKEY, HERBERT.
WINSTON, HARVEY. See CONNOR, JAMES L.
WOODS, STEPHEN C., AND SHOGREN, ROBERT E. Glycemic Responses following Conditioning with Different Doses of Insulin in Rats 220
ZAHLER, LUCY PEREZ, AND HARPER, A. E. Effects of Dietary Amino Acid Pattern on Food Preference Behavior of Rats 155
ZIELER, RONALD E. See LEWINSOHN, PETER M.